

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1 - 6 (canceled).

Claim 7 (previously presented). A gas quenching method, of the type in which a quenching cell (V1) receives objects to be quenched with a quenching gas, and comprising means for supplying pressurized quenching gas, connected to this cell, means for supplying gas comprising a buffer tank (V2) for containing quenching gas, characterized in that, after a quenching operation, all or part of the gas contained in the cell (V1) is recycled as follows:

- a) a main line connects the cell (V1) to said buffer tank (V2) via a compressor or booster set comprising one or more compressors/boosters in parallel (C1, C2, etc.);
 - b) a first intermediate storage tank (V3) receives quenching gas from the cell and feeds the compressor/booster set, and is located on a bypass of the main line;
 - c) after a quenching operation, the contents of the cell (V1) are emptied in one or more operations into the first intermediate storage tank (V3) by partial or complete pressure balancing between the two volumes of the cell (V1) and of the first intermediate storage tank;
 - d) the gas stored in said first intermediate storage tank (V3) is transferred to the buffer tank (V2) via the compressor/booster set; and
- a) if necessary, part of the content of the cell (V1) is released to the atmosphere.

Claim 8 (previously presented). The gas quenching method as claimed in claim 7, characterized in that the gas stored in said first intermediate storage tank (V3) is transferred to the buffer tank (V2) during a phase in which the quenching cell (V1) is immobilized in the course of the gas quenching method or during load transfers.

Claim 9 (Cancelled).

Claim 10 (previously presented). The gas quenching method as claimed in claim 7, characterized in that said quenching gas is a gas mixture, and in that a low pressure mixing module supplies the compressor/booster set with gas mixture (M1), and in that the mixing module comprises a dedicated tank for storing the fresh mixture thus synthesized.

Claim 11 (previously presented). The gas quenching method as claimed in claim 10, characterized in that said dedicated tank is filled in parallel sequence time in relation to the progress of the other phases of the method.

Claim 12 (previously presented). The gas quenching method as claimed in claim 11, characterized in that the quantity of synthesized fresh gas is controlled by the pressure in the dedicated tank.